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7. PUBLICATIONS:

- 1. Sylvan Elhay, Gene H. Golub, and Jaroslav Kautsky, Jacobi matrices for sums of weight functions, in BIT 32, 143-166 (1992).
- 2. D. Boley and Gene H. Golub, The nonsymmetric Lanczos algorithm and controllability, Systems and Control Letters 16, No. 2, 97-105 (1991).
- 3. (with P. Arbenz), QR-Like algorithms for symmetric arrow matrices, SIAM J. MATRIX ANAL. APPL., (1991).
- 4. Daniel L. Boley, Sylvan Elhay, Gene H. Golub, and Martin H. Gutknecht, Nonsymmetric Lanczos and finding orthogonal polynomials associated with indefinite weights, Numerical Algorithms(1), No. 1, 21-43 (1991).
- 5. Daniel L. Boley, Richard P. Brent, Gene H. Golub, and Franklin T. Luk, Algorithmic fault tolerance using the Lanczos process, in SIAM J. MATRIX ANAL. APPL., 312-332 (1992).
- 6. Michael Berry and Gene H. Golub, Estimating the largest singular values of large sparse matrices via modified moments, NUMERICAL ALGORITHMS (1), 353-374 (1991).
- 7. Bernd Fischer and Gene H. Golub, How to generate unknown orthogonal polynomials out of known orthogonal polynomials, J. COMPUTATIONAL & APPLIED MATH. 43, 99-115 (1992).
- 8. Roland W. Freund, Gene Golub, and Noël Nachtigal, *Iterative solutions of linear systems*, ACTA NUMERICA, 1-44 (1991).
- 9. Hongyuan Zha, A componentwise perturbation analysis of the QR decomposition, SIAM J. MATRIX ANAL. AND APPL., 14, 1124-1131 (1993).
- 10. A. Bojanczyk, G. H. Golub, and P. Van Dooren, The periodic Schur decomposition: Algorithms and applications, in SPIE, 1770, 31-42, 1992.
- 11. Bernd Fischer and Gene Golub, On the error computation for polynomial based iteration methods, in RECENT ADVANCES IN ITERATIVE METHODS, G. Golub, A. Greenbaum. and M. Luskin (eds.), Springer-Verlag, 1993.

11. OTHER ACCOMPLISHMENTS AND ACHIEVEMENTS:

Professor Golub has received the following honors:

- (a) Elected, National Academy of Sciences, April 1993.
- (b) Keynote Speaker at International Gautschi Conference, Purdue University, Purdue, Indiana, December 1993.
- (c) Keynote Speaker at Cornelius Lanczos International Centenary Conference, North Carolina State University, Raleigh, North Carolina, December 1993.
- (d) Elected, American Academy of Arts and Sciences, March 1994.
- (e) Awarded, B. Bolzano Gold Medal for Merit in the Field of Mathematical Sciences, Academy of Sciences of the Czech Republic, March 1994.

